## ABSTRACT

At present to facilitate multimedia/voice/fax/realtime applications on the Internet requires the IP packets to be given priority over other packets by methods such as RSVP/Tag Switching to ensure Quality of Service.

Here is presented a method whereby an Internet Time multiplexed Circuit Connection is established enabling data communications at both ends in exactly the same way as in the case where the Internet Connection so established is a PSTN switched circuit connection, at wire speed with same transmissions quality.

At predetermined periods (the single individual periods of which may be different in time durations at each nodes) all selected nodes between source & destination are arranged to automatically switch incoming signals to next node at wire speed without buffering delay/route computation delay, thus establishes a Time Multiplexed Circuit Connection for the durations of the predetermined periods, as in the case where a simplex PSTN dedicated circuit connection has been established